



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Barret Lippey, et al.
Serial No. : 10/028,063
Filed : December 21, 2001
Title : SELECTIVE REFLECTING

Art Unit : 2851
Examiner : Christopher E. Mahoney

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Copies of the references listed on the attached form PTO-1449 are enclosed. A copy of a communication from a foreign patent office in a counterpart application is also enclosed.

This statement is being filed before a first Office action on the merits. I, the undersigned, hereby certify that each item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application, the communication being dated March 7, 2003, which is not more than three months prior to the filing of this statement. The Commissioner is authorized to apply any charges to Deposit Account No. 06-1050, Order No. 02103-406001.

Respectfully submitted,

FISH & RICHARDSON P.C.

Date: JUN -3 2003



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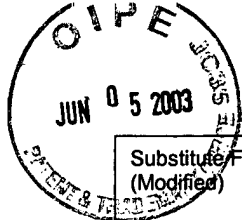
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JUN -3 2003
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Typed or Printed Name of Person Signing Certificate

Substitute Form PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark OfficeAttorney's Docket No.
02103-406001Application No.
10/028,063**Information Disclosure Statement
by Applicant**

(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant
Barret Lippey, et al.Filing Date
December 21, 2001

Group Art Unit

U.S. Patent Documents

| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
|------------------|-----------|-----------------|------------------|----------|-------|----------|----------------------------|
| | AA | | | | | | |
| | AB | | | | | | |
| | AC | | | | | | |
| | AD | | | | | | |
| | AE | | | | | | |
| | AF | | | | | | |
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| | AI | | | | | | |
| | AJ | | | | | | |
| | AK | | | | | | |

Foreign Patent Documents or Published Foreign Patent Applications

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation | |
|------------------|-----------|-----------------|------------------|--------------------------|-------|----------|-------------|----|
| | | | | | | | Yes | No |
| | AL | 05216123-A | 27-08-1993 | Japan | | | X | |
| | AM | 0856768-A | 05-08-1998 | EPO | | | X | |
| | AN | 05011344-A | 22-01-1993 | Japan | | | X | |
| | AO | | | | | | | |
| | AP | | | | | | | |

Other Documents (include Author, Title, Date, and Place of Publication)

| Examiner Initial | Desig. ID | Document |
|------------------|-----------|----------|
| | AQ | |
| | AR | |
| | AS | |
| | AT | |

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



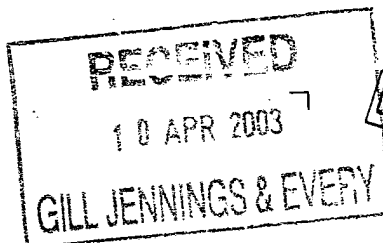
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Datum/Date

07. 04. 03

Zeichen/Ref./Réf.

MJB07348EP

Anmeldung Nr./Application No./Demande n°//Patent Nr./Patent No./Brevet n°

02102872.5-2217/

Anmelder/Applicant/Demandeur//Patentinhaber/Proprietor/Titulaire
BOSE CORPORATION

COMMUNICATION

The European Patent Office herewith transmits the partial European search report under Rule 46(1) EPC relating to the above-mentioned European patent application.

Copies of the documents cited in the search report are enclosed.

The applicant's attention is drawn to the following:

The search Division informs the applicant that if the European search report is also to cover inventions other than the invention first mentioned in the claims, a further search fee must be paid for each of these inventions, within ONE MONTH after notification of this communication.

If the application has been filed up to 30 June 1999, the search fee in force before 01 July 1999 (EUR 869,-) or the equivalent applicable on the date of payment is payable.

This applies also to the search fees requested under Rule 46(1) EPC:

See also OJ EPO 06/1999, 405.

☐ The abstract was modified by the Search Division and the definitive text is attached to the present communication.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

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Note to users of the automatic debiting procedure:

Unless the EPO receives prior instructions to the contrary, the search fee(s) will be debited on the last day of the period for payment. For further details see the Arrangements for the automatic debiting procedure, Supplement to OJ EPO 02/1999.

REGISTERED LETTER



European Patent
Office

PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 46, paragraph 1 of the European Patent Convention EP 02 10 2872

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|--|--|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.7) |
| X | PATENT ABSTRACTS OF JAPAN vol. 017, no. 658 (P-1654), 6 December 1993 (1993-12-06) -& JP 05 216123 A (TOPPAN PRINTING CO LTD), 27 August 1993 (1993-08-27) | 1-5, 9-12, 21, 22, 32 | G03B21/60 |
| A | * abstract; figures 1-6 * | 52-56, 63-65 | |
| X | EP 0 856 768 A (XEROX CORP) 5 August 1998 (1998-08-05) | 1, 9-12, 21, 22, 32 | |
| A | * column 3, line 35 - column 4, line 81 * * figures 1-4, 6-8 * | 52-56, 63-65 | |
| A | PATENT ABSTRACTS OF JAPAN vol. 017, no. 273 (P-1545), 26 May 1993 (1993-05-26) & JP 05 011344 A (TOPPAN PRINTING CO LTD), 22 January 1993 (1993-01-22) * abstract * | 1-5 | |
| | | | TECHNICAL FIELDS SEARCHED (Int.Cl.7) |
| | | | G03B |
| LACK OF UNITY OF INVENTION | | | |
| The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely: | | | |
| see sheet B | | | |
| The present partial European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims. | | | |
| Place of search MUNICH | | Date of completion of the search 20 March 2003 | Examiner PAVON |
| CATEGORY OF CITED DOCUMENTS | | | |
| X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document | | T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | |

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EPO FORM 1503 03.82 (P04C27)



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-5, 9-12, 21, 22, 32, 52-56, 63-65 and 67

The problem addressed in claims 1-5, 9-12, 21, 22, 32, 52-56, 63-65 and 67 is to enhance the contrast of images projected onto a projection screen by reducing the influence of ambient light on the projection screen. The solution proposed is an absorbing material that selectively absorbs light at specific wavelengths.

2. Claims: 6-8, 13-16, 23-26, 51, 57 and 59

The problem addressed in claims 6-8, 13-16, 23-26, 51, 57 and 59 is to enhance the contrast by increasing the luminance of the projected image. The solution proposed is multilayer interference coating that selectively reflects specific wavelengths of the projected light.

3. Claims: 27-29, 60-62, 66 and 68

The problem addressed in claims 27-29, 60-62, 66 and 68 relates to an ambient light for an audience without reducing contrast of a projection system. The solution proposed is a source of ambient light with an inverse spectral structure to that of the projector.

4. Claims: 17-19, 33 and 34-40

The problem addressed in claims 17-19, 33 and 34-40 is to adapt the viewing angle of the image projected on the screen to an audience. The solution proposed is an asymmetric diffuser for angular spreading of the projected image.

5. Claims: 20, 30, 31, 41, 47-49 (and 50?)

The problem addressed in claims 20, 30, 31, 41, 47-49 (and 50?) is to enhance the contrast between ambient light and projected light. The solution proposed is a polarizing layer for absorbing light of a polarization direction orthogonal to that of the projector. It is not clear if claim 50 should belong to this group or to group 7.

6. Claim : 58

The problem addressed in claim 58 relates to the problem of optimizing the angle of incidence of light upon the screen, which is solved by using a curved screen.

7. Claims: 42-46 (and 50?)

The problem addressed in claims 42-46 (and 50?) is to balance the spectrum of the projector lamp. The solution



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

proposed is to use a second light source for adding a colour to the spectrum of the first lamp. It is not clear if claim 50 should belong to this group or to group 5.

The subject matter of claims 1, 9 and 21 is already known from document D1 (JP 05 216 123 A; cf. Abstract and figures) and D2 (EP 0 856 768 A; cf. Abstract and figures, for example).

Therefore, it appears that above identified groups of claims do not share a common special technical feature linking the claims so as to form a single inventive concept, Rule 30 (1).

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 10 2872

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-03-2003

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| JP 05216123 | A | 27-08-1993 | NONE | |
| <hr/> | | | | |
| EP 0856768 | A | 05-08-1998 | US 5875012 A | 23-02-1999 |
| | | | EP 0856768 A2 | 05-08-1998 |
| | | | JP 10221679 A | 21-08-1998 |
| <hr/> | | | | |
| JP 05011344 | A | 22-01-1993 | NONE | |
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